AP Computer Science

Locker Lab

Oswego High School has exactly 100 numbered lockless lockers and 100 studious students. On the first day of school, all of the lockers are closed. Traditionally, the first student to enter the building opens every locker, starting with locker 1. The second student to enter closes every other locker, starting with locker 2. The third student to enter changes the state of every 3rd locker, starting with locker number 3. After all of the students have entered the building and performed their part of the tradition, which lockers are still open?

Write a recursive program to print out the locker numbers that they are still open after all of the students change the state of the lockers.